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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/584,935	05/31/2000	Marcos N. Novaes	POU9-2000-0007-US1	5026

7590 03/04/2004

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EXAMINER

WON, YOUNG N

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 03/04/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

8

Office Action Summary

Application No.

09/584,935

Applicant(s)

NOVAES ET AL.

Examiner

Young N Won

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7,9-12,22-24,29,31-34,44-46,48,49,54,56-59 and 69-71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7,9-12,22-24,29,31-34,44-46,48,49,54,56-59 and 69-71 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 7, 9-12, 22, 24, 29, 31-34, 44, 46, 48, 49, 54, 56-59, 69, and 71 have been amended.
2. Claims 1, 4-6, 8, 13-21, 25-28, 30, 35-43, 47, 50-53, 55, and 60-68 have been cancelled.
3. Claims 7, 9-12, 22-24, 29, 31-34, 44-46, 48, 49, 54, 56-59, and 69-71 are pending with this action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 22, 24, 44, 46, 48, 49, 69, and 71 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The examiner left a

Art Unit: 2155

message with the applicant's representative's associate on February 25, 2004 regarding the amendment and in particular to element of "providing a regenerated copy of the unique identifier..." or "regenerating the unique identifier"(Emphasis underlined). The applicant's representative responded on February 26, 2004 referring the examiner to pages 35-37, specifically page 35, lines 10-19, but the examiner could not conclude from the disclosure "the unique identifier is derived, in one instance, from a number stored in read only memory (ROM) in the mother board of the system" (page 35, lines 17-19), as equating to "regeneration". There does not appear to be a written description of the claim limitation in the application as filed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7, 9-12, 22-24, 29, 31-34, 44-46, 48, 49, 54, 56-59, and 69-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Short et al. (US 6178529 B1) in view of Trottier et al. (US 4851988 A).

INDEPENDENT:

As per claims 22, 44, and 69, Short teaches a method, a system (see title), and at least one program storage device readable by a machine tangibly embodying at least one program of instructions executable by the machine to perform a method (see col.2, lines 40-42 and col.3, lines 28-32), of managing (see col.1, lines 11-13 and col.4, lines 36-37) identifiers of components of a distributed computing environment (see col.9, lines 49-59), said method comprising: providing, by an operating system instance of said distributed computing environment (see col.2, lines 51-56), a unique identifier of a component of the distributed computing environment to a cluster of the distributed computing environment (see col.9, lines 49-65); storing, by the cluster, the unique identifier in local storage and global storage (see col.2, lines 54-56); providing a regenerated copy of the unique identifier in response to a cluster event (see col.4, lines 40-42); determining, in response to the cluster event, whether the regenerated unique identifiers are in agreement; and performing an action in response to the determining indicating one or more of the regenerated unique identifiers are not in agreement (see col.6, lines 46-65). Although Short teaches of local unique identifier (see col.9, lines 53-56), he does not explicitly teach ~~of~~ a global unique identifier. Trottier teaches of a global unique identifier (see Fig.2 and col.2, lines 25-48). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Trottier within the system of Short by implementing a global identifier within the method, system, and program of managing identifiers in a distributed computing environment because Short teaches that "the invention may also be practiced in a distributed computing environments" (see col.2, lines 51-56) and further teaches of a

"global update manager 100 operates to provide global update services that is used by other components within the Cluster Service 70" (see col.6, lines 18-20). Therefore one of ordinary skill in the art would employ the teachings of Trottier into the global update manager, if the system of Short were implemented in a distributed computing environment, because Trottier teaches that the global identifier, representing the global resource, can be used to determine whether the resource is local or remote (see Trottier: col.42, lines 56-61).

As per claims 24, 46, and 71, Short teaches a method, a system (see title), and at least one program storage device readable by a machine tangibly embodying at least one program of instructions executable by the machine to perform a method (see col.2, lines 40-42 and col.3, lines 28-32), of managing (see col.1, lines 11-13 and col.4, lines 36-37) identifiers of components of a distributed computing environment (see col.9, lines 49-59), said method comprising: identifying a component of the distributed computing environment (see col.2, lines 51-56) by a unique identifier (see col.9, lines 49-65) and a copy of the unique identifier (see col.4, lines 40-42); regenerating the unique identifier in response to a cluster event (see col.4, lines 40-42); and automatically updating (see Fig.3, #70 and col.6, lines 46-50), by a cluster of the distributed computing environment, one or more of the regenerated unique identifier, to provide consistency among the regenerated unique identifier copy, in response to a cluster event (see col.6, lines 46-65). Although Short teaches of local unique identifier (see col.9, lines 53-56), he does not explicitly teach of a global unique identifier (see claims 22, 44, and 69).

As per claim 48, Short teaches a system (see title) of managing (see col.1, lines 11-13 and col.4, lines 36-37) identifiers of components of a distributed computing environment (see col.9, lines 49-59), said system comprising: an operating system instance of said distributed computing environment (see col.2, lines 51-56) to provide a unique identifier of a component of the distributed computing environment to a cluster of the distributed computing environment (see col.9, lines 49-65); local storage and global storage of the distributed computing environment to store the unique identifier (see col.2, lines 54-56); a distributed configuration manager of the cluster (see Fig.3, #72, 74, 80, 84, 86, 88, 98, &100) to provide a regenerated unique identifier in response to a cluster event (see col.4, lines 40-42), and to determine, in response to the cluster event, whether the regenerated unique identifiers are in agreement, and to perform an action in response to the determining indicating one or more of the identifiers are not in agreement (see col.6, lines 46-65). Although Short teaches of local identifier (see col.9, lines 53-56), he does not explicitly teach of a global identifier (see claims 22, 44, and 69).

As per claim 49, Short teaches a system (see title) of managing (see col.1, lines 11-13 and col.4, lines 36-37) identifiers of components of a distributed computing environment (see col.9, lines 49-59), said system comprising: a component of the distributed computing environment (see col.2, lines 51-56) identified by a unique identifier (see col.9, lines 49-65), a copy of the unique identifier (see col.4, lines 40-42); means for regenerating the unique identifier in response to a cluster event (see col.4, lines 40-42); and a cluster of the distributed computing environment to automatically

update (see Fig.3, #70 and col.6, lines 46-50) one or more of the regenerated unique identifier, to provide consistency among the unique identifier in response to the cluster event (see col.6, lines 46-65). Although Short teaches of local identifier (see col.9, lines 53-56), he does not explicitly teach of a global identifier (see claims 22, 44, and 69).

DEPENDENT:

As per claim 7, 29, and 54, Short further teaches wherein said event comprises a joining of said operating system instance to said cluster (see col.6, lines 46-50).

As per claims 9, 31, and 56, Short further teaches further teaches wherein said performing an action comprises allowing the event to proceed, in response to the unique identifier, the local unique identifier and the global unique identifier being consistent (see col.6, lines 61-65).

As per claims 10-12, 32-34, and 57-59, Short further teaches wherein said performing an action comprises updating the local unique identifier to reflect that the operating system instance has been deleted from the cluster: in response to the unique identifier being equal to the local identifier, and the local unique identifier being unequal to the global unique identifier; in response to the unique identifier being unequal to the local unique identifier, and the local identifier being equal to the global unique identifier; and in response to the unique identifier being unequal to the local unique identifier, and the local unique identifier being unequal to the global unique identifier (see col.6, lines 59-65). If the teaching of Trottier were employed, it would be inherent that all identifiers would be updated whenever any of the identifiers were inconsistent as such is known

and employed in the art that comprises a table, tree, or a list of information used for processing by devices such as routers, databases, servers,... ect.

As per claims 23, 45, and 70, Short further teaches wherein said cluster event comprises a join of the operating system instance to the cluster.

Response to Arguments

6. Applicant's arguments filed January 8, 2004 have been fully considered but they are not persuasive.

7. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Clearly, the statement of column 2, lines 51-56, suggests that Short's system can be employed in a distributed computing environment utilizing the teachings of resource monitoring in a server cluster environment. Short teaches of a local server cluster environment teaching of a unique identification "RESID" which "describes a particular resource object 63 (e.g., device or software)", but does not explicitly teach of a global identification. Trotter teach of global identifiers which would inherently be employed if the system was distributed, since Short teaches of local identifiers.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

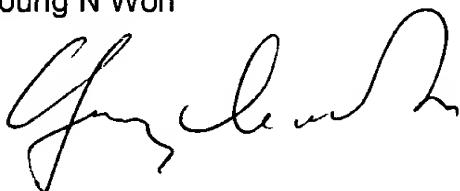
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Young N Won whose telephone number is 703-605-4241. The examiner can normally be reached on M-Th: 6AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T Alam can be reached on 703-308-6662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2155

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Young N Won



February 26, 2004



HOSAIN ALAM
SUPERVISORY PATENT EXAMINER